

What is Claimed is:

1. A method of repairing memory cells comprises the steps of:
 - 5 checking a failure rule through a bit map test of failed memory cells;
 - fixing a residual address signal as a constant state to convert it to a smaller density when a failure rule in the failed memory cells is detected;
 - 10 converting an address scramble map to selectively convert an output-address-signal path by a predetermined control signal in response to the address signal input to thereby change an address code; and
 - 15 converting high density memory cells to smaller density memory cells by outputting the changed address code.
2. The method as defined in claim 1, wherein the constant state is a logic high or a logic low.
- 15 3. The method as defined claim 1, wherein the predetermined control signal includes an address selecting control signal for selecting an address to be converted; and an address code control signal for selecting a signal path which converts to an address code to be converted.
- 20 4. The method as defined in claim 1, wherein converting and address scramble map further comprises:
 - 25 cutting-off an original output path of the address to be converted by the address selecting control signal;
 - forming output paths of the address to be converted as a new output pass path which selected by the address code control signal; and
 - outputting an address code signal which is converted through the new address output pass path.